

Title (en)  
CLOCK REGENERATION CIRCUIT

Title (de)  
TAKTREGENERIERUNGSSCHALTUNG

Title (fr)  
CIRCUIT DE REGENERATION DU SIGNAL D'HORLOGE

Publication  
**EP 1786165 A4 20071107 (EN)**

Application  
**EP 05780288 A 20050815**

Priority  
• JP 2005014914 W 20050815  
• JP 2004250067 A 20040830

Abstract (en)  
[origin: EP1786165A1] Clock synchronization resistance is improved against selectivity fading without degrading the stability of clock phase synchronization control. Clock phase detector 7, which forms part of a clock reproduction PLL, is preceded by orthogonal component equalizer 6 for removing only orthogonal component interference wave not affecting the clock regeneration, thereby assuring an opening of an eye pattern and maintaining the gain of clock phase detector 7 without erasing the clock phase information. Accordingly, even when inter-symbol interference is caused in a received signal by selectivity fading or the like, part of the interference component can be erased to keep the opening of the eye pattern wide. Thus, the clock synchronization resistance can be improved against the selectivity fading without degrading the stability of the clock phase synchronization control.

IPC 8 full level  
**H04L 27/38** (2006.01)

CPC (source: EP US)  
**H04L 7/0083** (2013.01 - EP US); **H04L 7/0334** (2013.01 - EP US)

Citation (search report)  
• [A] GB 2145906 A 19850403 - NEC CORP  
• [A] EP 0810760 A1 19971203 - NEC CORP [JP]  
• [A] JP S6474830 A 19890320 - FUJITSU LTD  
• [A] HODGKISS W: "Equaliser-based clock extraction for modems", ELECTRONICS LETTERS, IEE STEVENAGE, GB, vol. 30, no. 16, 4 August 1994 (1994-08-04), pages 1277 - 1279, XP006000862, ISSN: 0013-5194  
• See references of WO 2006025212A1

Cited by  
US2021266140A1; US11637684B2

Designated contracting state (EPC)  
DE FR GB IT SE

DOCDB simple family (publication)  
**EP 1786165 A1 20070516; EP 1786165 A4 20071107; EP 1786165 B1 20101103**; CN 101002449 A 20070718; CN 101002449 B 20100609; DE 602005024573 D1 20101216; JP 4389934 B2 20091224; JP WO2006025212 A1 20080508; US 2007253515 A1 20071101; US 7924962 B2 20110412; WO 2006025212 A1 20060309

DOCDB simple family (application)  
**EP 05780288 A 20050815**; CN 200580027287 A 20050815; DE 602005024573 T 20050815; JP 2005014914 W 20050815; JP 2006531794 A 20050815; US 66078205 A 20050815